

NOTE: ALL REWORKS MUST BE DONE ON THE COMPONENT SIDE OF THE BOARD. KEEP ALL WIRES AS SHORT AS POSSIBLE.

REWORK PROCEDURE 1: (RTC FIX) (FOR TT030 REV B.1 ABD REV D BOARDS, SEE FIGURE 1.)

| FAB | ACTION REQUIRED | REF |
|---------|--|------|
| B.1 & D | 1. CUT ALL PINS OF U402, R407, AND C406. REMOVE THESE COMPONENTS FROM BOARD. | |
| | 2. RUN A WIRE FROM U402 SOLDER PAD 2, TO C406 LEFT SOLDER PAD. | J1 |
| | 3. ADD R412, 22M, P/N 14-5226, BETWEEN U401 PIN 2 AND 3. | R412 |
| | 4. ADD R413, 470K, P/N 14-5474, BETWEEN U401 PIN 3, AND R407 TOP SOLDER PAD. | R413 |
| | 5. ADD C414, 5-30pF, P/N C070474, BETWEEN U402 SOLDER PAD 3 AND 7. | C414 |
| | 6. ADD C415, 20pF, P/N C014179-13, BETWEEN U402 SOLDER PAD 1, AND U405 PIN 7. | C415 |
| | 7. CONNECT A FREQUENCY COUNTER BETWEEN U401 PIN 3 AND GROUND. | U401 |
| | 8. MEASURE THE AMBIENT ROOM TEMPERATURE. | |
| | 9. ADJUST THE TRIMMER CAPACITOR TO THE FREQUENCY INDICATED IN TABLE 1, AS CLOSE AS POSSIBLE. | C414 |

REWORK PROCEDURE 2: (VME BUS FIX) (SEE FIGURE 2 FOR REV B.1 BOARD, & FIGURE 3 FOR REV D BOA

| FAB | ACTION REQUIRED | REF |
|---------|---|------|
| B.1 & D | 1. REPLACE 74ALS30, POSITION U711, WITH 7430, PART NUMBER C101609-030. NOTE: DO NOT SOLDER PIN8. | |
| | 2. REPLACE 74LS244, POSITION U705, WITH 74F244, PART NUMBER C300259-244. | |
| | 3. CUT PIN 6 OF U701. | C1 |
| | 4. RUN A WIRE FROM U704 PIN 1, TO U702 PIN 11. | J1 |
| | 5. CUT PINS 17, 18, AND 19 OF U703. NOTE: KEEP IC PINS ABOUT 1/32 INCHES LONG FOR SOLDERING IN THE NEXT 3 STEPS. | C2 |
| | 6. RUN A WIRE FROM U703 PIN 17, TO U705 PIN 13. | J2 |
| | 7. RUN A WIRE FROM U703 PIN 18, TO U705 PIN 17. | J3 |
| | 8. RUN A WIRE FROM U703 PIN 19, TO U705 PIN 15. | J4 |
| | 9. RUN A WIRE FROM U705 PIN 3, TO U701 PIN 12. | J5 |
| | 10. RUN A WIRE FROM U705 PIN 5, TO U702 PIN 13. | J6 |
| | 11. RUN A WIRE FROM U705 PIN 7, TO U702 PIN 14. | J7 |
| | 12. CUT PIN 8 OF U711. NOTE: KEEP IC PIN ABOUT 1/32 INCHES LONG FOR SOLDERING IN THE NEXT STEP. | C5 |
| | 13. INSERT R702, 47 Ohms, PART NUMBER 14-5470/A BETWEEN U711 PIN 8 OF THE IC, AND U711 PIN 8 SOLDER PAD ON THE BOARD. | R702 |

LAZER SHADOW PRINTING FIX, MULTIPLE MEGAESTE
READING FIX, AND DATA SETUP TIME FIX

| FAB | ACTION REQUIRED | REF |
|-----|---|------|
| B.1 | 1. REPLACE THE 68 Ohm RESISTOR NETWORK, POSITION RP42, WITH 10 Ohm RESISTOR NETWORK, P/N C101006-100. | RP42 |

ASCI DATA HOLD TIME FIX

| FAB | ACTION REQUIRED | REF |
|--------|--|------|
| B1 & D | 1. REPLACE THE 74LS244, POSITION U403, WITH 74F244, P/N C300259-244. | U403 |

OSCILLATOR FIX
SEE FIGURE 4

| FAB | ACTION REQUIRED | REF |
|-----|---|--------------|
| D | 1. LIFT LEFT SIDE OF R888 (SIDE NEAREST U111). 2. CONNECT A JUMPER WIRE (AS SHORT AS POSSIBLE) FROM PIN 1 OF U110 TO LEFT SIDE OF R888 (SIDE NEAREST U111). INSULATE THE CONNECTION WITH A PIECE OF HEATSHRINK TUBING TO PREVENT SHORTING TO SOLDER PAD UNDER R888. 3. MARK PCB WITH NEW ASSEMBLY REVISION LEVEL. | C1 J1 |

REWORK PROCEDURE

| FAB | ACTION REQUIRED | REF | ECO# |
|-----|--|--|------|
| B.1 | 1. JUMPER GROUND PLANES ON SOLDER SIDE. 2. MARK PCB WITH NEW ASSY REV LEVEL. | J1 | 1269 |
| B.1 | 0. APPLY CUTS AND JUMPERS TO COMPONENT SIDE. 1. CUT ETCH FROM U206-43 (MCU). 2. JUMPER U206-43 TO U110-13 (74F04) 3. JUMPER U110-12 TO U712-12, 13 (74LS74). 4. JUMPER RP204-6 (68 ohm) TO U907-1 (74LS86). 5. JUMPER U907-2 TO U907-14. 6. JUMPER U907-3 TO U712-11. 7. JUMPER U712-10 TO U712-4. 8. JUMPER U712-8 TO U900-83 (DMAC). 9. MARK PCB WITH NEW ASSY REV LEVEL. | C1 J1 J2 J3 J4 J5 J6 J7 | 1322 |
| D | 0. APPLY CUTS AND JUMPERS TO COMPONENT SIDE. 1. CUT U110-13 AT THE BOTTOM OF THE IC LEG. 2. JUMPER U110-13 TO U900-81. 3. JUMPER U110-12 TO U712-12, 13. 4. JUMPER U712-10 TO U712-4. 5. CUT ETCH AT UA00-83. 6. JUMPER U712-8 TO UA00-83. 7. JUMPER U907-1 TO U907-14. 8. JUMPER U907-2 TO U309-8. 9. JUMPER U907-3 TO U712-11. 10. COVER FUSE F61 WITH INSULATING TUBING TO PREVENT SHORTING TO POWER SUPPLY FOOT. 11. COVER FERRITE BEAD L601 WITH INSULATING TUBING TO PREVENT SHORTING TO POWER SUPPLY. 12. PLACE INSULATING TAPE OVER FUSE F61 AND FERRITE BEAD L601 TO PREVENT SHORTING TO POWER SUPPLY MOUNTING FOOT. 13. MARK PCB WITH NEW ASSY REV LEVEL. | C1 J1 J2 J3 C2 J4 J5 J6 J7 F61 L601 F61, L601 | 1323 |

D

DRAWING NO.
CA400961

SHEET
1

REV
K

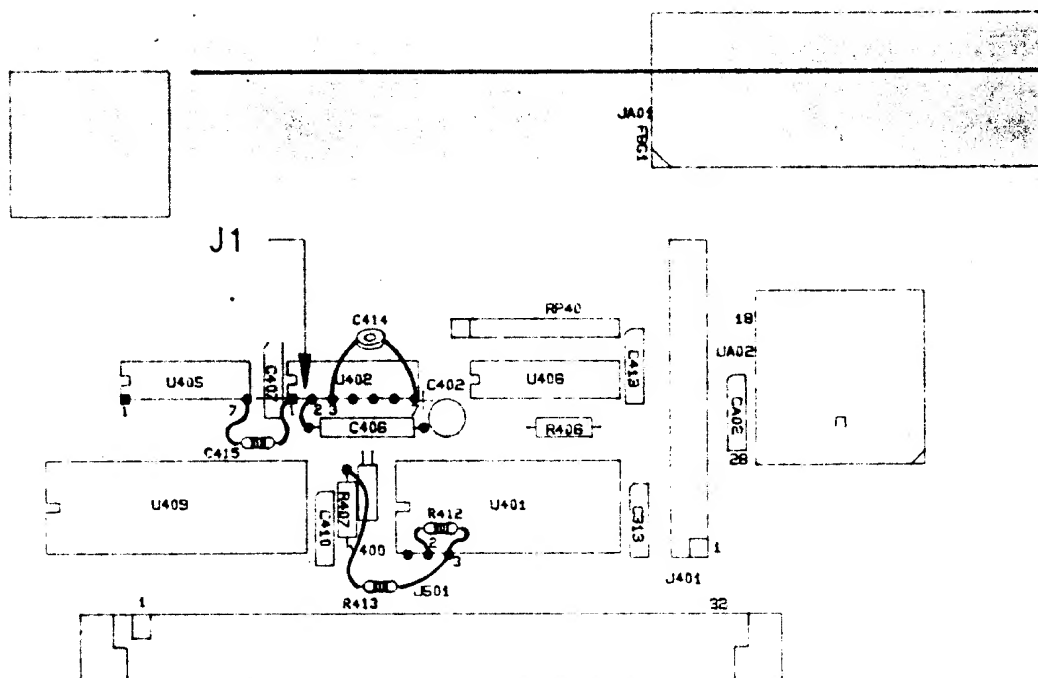



FIGURE 1
REV B.1 & REV D
TT030 BOARD REWORK

| | | |
|---|--------------------------------|-----------------|
|  ATARI MICROSYSTEMS CORPORATION 4115 KELLER SPRING RD., SUITE 200 DALLAS, TEXAS 75244 | | |
| TITLE SUB ASSY. DRAWING, TT030 32 Mhz | | |
| SIZE D | DRAWING NO. CA400961 | REV K |
| SCALE NONE | SHEET 2 OF 2 | |

DRAWING NO.
CA400961

SHEET
2

REV
K

B

A

TABLE 1
REAL TIME CLOCK FREQUENCY vs AMBIENT TEMPERATURE

| AMBIENT TEMPERATURE (°C) | TARGET FREQUENCY (hz) |
|-----------------------------|--------------------------|
| 25 | 32,768.046 |
| 26 | 32,768.090 |
| 27 | 32,768.134 |
| 28 | 32,768.178 |
| 29 | 32,768.222 |
| 30 | 32,768.266 |
| 31 | 32,768.310 |
| 32 | 32,768.354 |
| 33 | 32,768.400 |
| 34 | 32,768.444 |
| 35 | 32,768.488 |
| 36 | 32,768.532 |
| 37 | 32,768.576 |
| 38 | 32,768.620 |
| 39 | 32,768.664 |
| 40 | 32,768.708 |
| 41 | 32,768.752 |
| 42 | 32,768.796 |
| 43 | 32,768.840 |
| 44 | 32,768.884 |
| 45 | 32,768.928 |
| 46 | 32,768.972 |
| 47 | 32,769.016 |
| 48 | 32,769.060 |

D

C



REV K



FIGURE 2
REV B.1 TT030
BOARD RFWORK

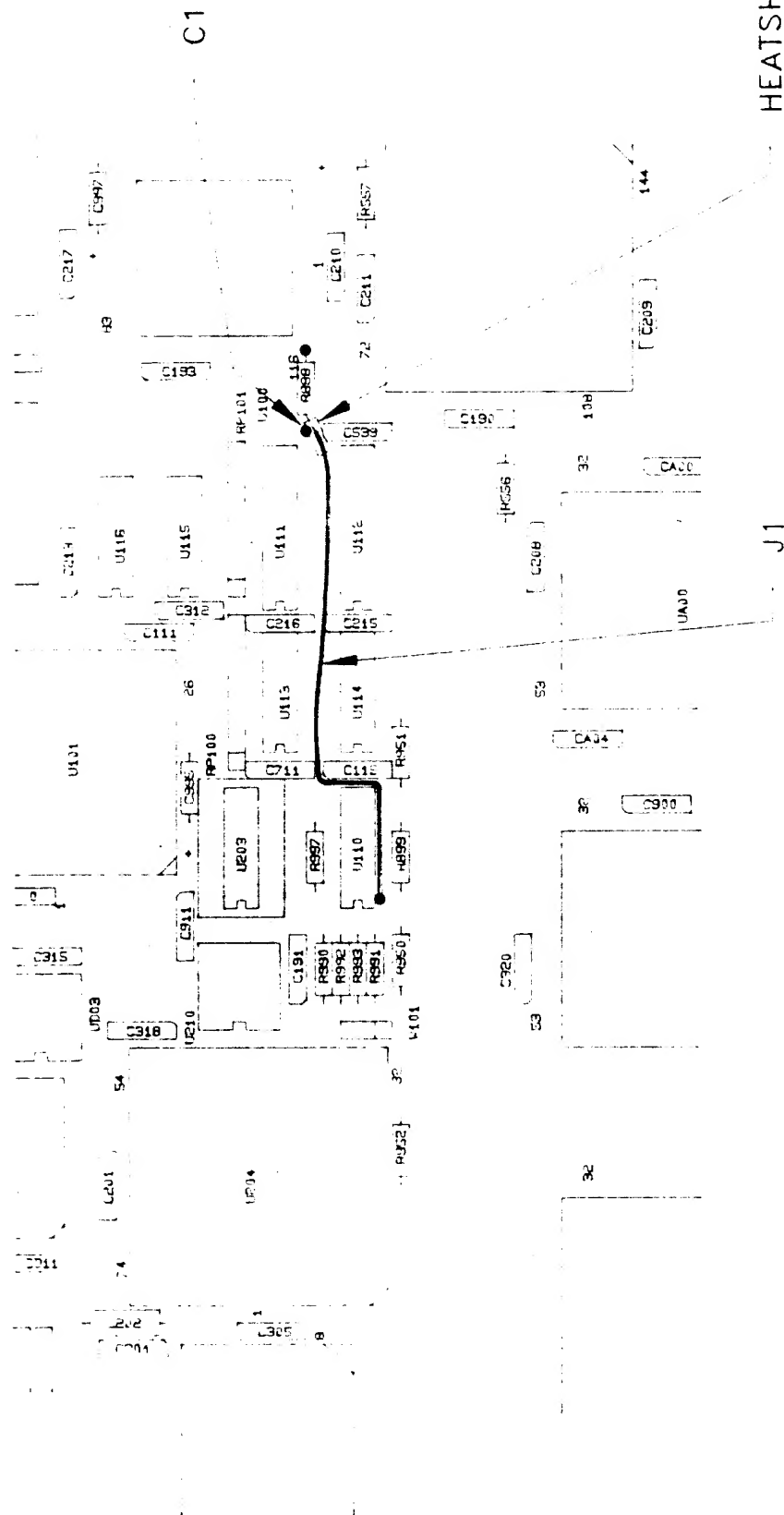


FIGURE 4
REV D TT030
BOARD REWORK

HEATSHRINK
TUBING